

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently amended) A compound comprising uricase covalently bonded via a linking group to polyethylene glycol, wherein the polyethylene glycol has a total weight average molecular weight of about 12,000 to about 30,000, ~~and~~ wherein the linking group is selected from the group consisting of a succinimide group, an amide group, an imide group, a carbamate group, an ester group, an epoxy group, a carboxyl group, a hydroxyl group, a carbohydrate, a tyrosine group, a cysteine group, a histidine group and combinations thereof and wherein said uricase comprises 12 to about 30 polyethylene glycol molecules per uricase protein unit.
2. (Original) The compound of claim 1, wherein said linking group is a succinimide group.
3. (Original) The compound of claim 2, wherein said succinimide group is succinimidyl succinate, succinimidyl propionate, succinimidyl carboxymethylate, succinimidyl succinamide, N-hydroxy succinimide or combinations thereof.
4. (Original) The compound of claim 3, wherein said succinimide group is succinimidyl succinate, succinimidyl propionate or combinations thereof.
5. (Original) The compound of claim 1, wherein said uricase is derived from a microorganism selected from the group consisting of *Asperigillus flavus*, *Candida utilis*, *Arthrobacter protoformiae*, and combinations thereof.

6. (Original) The compound of claim 5, wherein said microorganism is *Asperigillus flavus*.
7. (Original) The compound of claim 5, wherein said microorganism is *Candida utilis*.
8. (Original) The compound of claim 5, wherein said microorganism is *Arthrobacter protoformiae*.
9. (Original) The compound of claim 1 wherein the polyethylene glycol has an average molecular weight of about 20,000.
10. (Currently amended) The compound of claim 1 wherein said uricase protein unit is covalently bonded to ~~about 10~~ 12 to about 25 polyethylene glycol molecules.
11. (Currently amended) The compound of claim 1, wherein said uricase protein unit is covalently bonded to about 18 to about 22 polyethylene glycol molecules.
12. (Currently amended) The compound of claim 1, wherein said uricase protein unit is covalently bonded to about 20 polyethylene glycol molecules.
13. – 20. (Canceled)
21. (Currently amended) The compound of claim 1 wherein polyethylene glycol is covalently attached to said uricase protein unit at one or more lysine residues.
22. (Currently amended) A method of enhancing the circulating half life of uricase comprising modifying said uricase by covalently bonding said uricase via a linking group to polyethylene glycol, wherein the polyethylene glycol has a total weight average molecular

weight of about 12,000 to about 30,000, wherein said uricase comprises 12 to 30 polyethylene glycol molecules per uricase protein unit, and wherein the linking group is selected from the group consisting of a succinimide group, an amide group, an imide group, a carbamate group, an ester group, an epoxy group, a carboxyl group, a hydroxyl group, a carbohydrate, a tyrosine group, a cysteine group, a histidine group and combinations thereof.

23. (Original) The method of claim 22 wherein the polyethylene glycol has an average molecular weight of about 20,000.

24. (Currently amended) The method of claim 22, wherein said uricase protein unit is covalently bonded to ~~about 10~~ 12 to about 25 polyethylene glycol molecules.

25. (Currently amended) The method of claim 22, wherein said uricase protein unit is covalently bonded to about 18 to about 22 polyethylene glycol molecules.

26. – 30. (Canceled)

31. (Original) A method of reducing uric acid levels in a patient comprising administering to said patient a therapeutically effective amount of the compound of claim 1.

32. (Original) The method of claim 31, wherein said patient has hypouricemia.

33. (Original) The method of claim 31, wherein said polyethylene glycol has an average molecular weight of about 20,000

34. (Original) The method of claim 31, wherein said linking group is a succinimide group.

35. (Original) The method of claim 32, wherein said succinimide group is succinimidyl succinate, succinimidyl propionate, succinimidyl carboxymethylate, succinimidyl succinamide, N-hydroxy succinimide or combinations thereof.
36. (Original) A method of treating uric acid related disorders in a patient comprising administering to said patient a therapeutically effective amount of the compound of claim 1.
37. (Original) The method of claim 36, wherein said polyethylene glycol has an average molecular weight of about 20,000
38. (Canceled)
39. (Currently amended) A compound comprising uricase coupled to polyethylene glycol, wherein the polyethylene glycol has a total weight average molecular weight of about 12,000 to about 30,000 and wherein said uricase comprises 12 to about 30 polyethylene glycol molecules per uricase protein unit.
40. (Original) The compound of claim 39 wherein the polyethylene glycol has an average molecular weight of about 20,000.
41. (Currently amended) The compound of claim 39, wherein said uricase protein unit is covalently bonded to ~~about 10~~ 12 to about 25 polyethylene glycol molecules.
42. (Currently amended) The compound of claim 39, wherein said uricase protein unit is covalently bonded to about 18 to about 22 polyethylene glycol molecules.
43. (Currently amended) The compound of claim 39, wherein said uricase protein unit is coupled to about 20 polyethylene glycol molecules.

DOCKET NO.: PHOE-0061
Application No.: 09/921,380
Office Action Dated: August 30, 2004

PATENT

44. – 47. (Canceled)